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UNITED STATES DEPARTMENT OF AGRICULTURE
Radio Service
OFFICE OF INFORMATION

HOUSEKEEPERS' CHAT Saturday, January 29, 1938

(FOR BROADCAST USE ONLY)

Subject: "NEWS NOTES FROM WASHINGTON." Information from the Bureau of Home Economics, United States Department of Agriculture.

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In the old days midwinter was the season for handicrafts. Shut in and often snowed in grandmother had many long winter days to do her spinning and weaving or to brew dyes for her fabrics from nut hulls, bark, or dried flowers.

Housewives today aren't shut in as they once were. In this machine age they have telephones and automobiles and cleared highways to get them out. And they don't have to spend any time in handicrafts if they don't want to. They can depend on factories to spin and weave and dye fabrics or make dyes for them to use. But just the same, many a woman today enjoys this lull between the holidays and spring because it gives her time to indulge in handicrafts. Many a modern housewife is weaving and quilting as her ancestors did -- for her own pleasure and often for profit, too.

So you may be particularly interested in this week's letter from Washington, D. C., telling about the young woman chemist at the Bureau of Home Economics who has made a special investigation of the dyes and dye materials such as our grandmothers used -- the native or natural dyes, as she calls them.

Writes our correspondent: "If you drop in to make a call on Margaret Furry, textile chemist at the Bureau of Home Economics, you are likely to be surprised at what she has on her shelves. You will see there rows of glass jars filled with all sorts of odd things -- pieces of dried oak bark, for example, and dried heads of garden and wild flowers, hickory nut hulls, lichens such as you find on trees and rocks in the woods, juniper berries, chunks of indigo, and even a jar of tiny red dried insects. But before you have much time to comment on this curious collection of chemicals, Miss Furry will bring out another collection -- a pile of samples of cloth in so many lovely shades that you are likely to begin asking prices. But these fabrics are not for sale.

"Miss Furry will explain that they are simply samples of the results she got by using various natural dyestuffs such as those curious things in the jars. She tested about 65 materials for dyeing both cotton and wool. And she found out from these tests which make good dyes, how best to use them, what colors they will give, which are fast to light and which are fast to washing.

"She made this study because so many people all over the country, especially handicraft workers, asked for information on natural, or as some people call them, 'vegetable' dyes. But she will tell you that for most purposes the synthetic dyes made by commercial chemical processes are more satisfactory because they are easier and quicker to use and give more certain results.

"Miss Furry says that most natural dyes are what the chemists call mordant-dyes, that is, they need a mordant to set the color. I looked up the word mordant in the dictionary and find that it comes from the old French word meaning to bite. So a mordant is a substance that bites into the cloth and makes the color fast. The mordants most people use for natural dyes are alum, chrome, copperas, tannic acid, or some other tannin substance like oak galls or sumac leaves. But what interested me most about mordants is the different colors you can get from one dye by using different mordants.

"For example, Miss Furry showed me four samples of wool cloth all dyed with cochineal. (That is the dye from tiny red insects.) One sample was a deep maroon, another a brilliant red, another a deep purple, and a fourth a rose pink. Yet they all came from the same dye. The difference was in the mordants used. Then she showed me a sample of a bright clear orange color dyed by using dahlia flowers with a chrome mordant and another of pale yellow also dyed with dahlia flowers but with alum as the mordant.

"Miss Furry has all shades of the rainbow among her samples which is good enough proof that natural dyes will give almost any desired color if properly used. But because tannin is so common in nature -- occurs in all parts of almost every plant, and because tannin produces shades of brown, grey or yellow, these are colors easy to get from many different sources. From some 38 substances Miss Furry got fast dyes in shades of brown and from 20 she got shades of yellow. Her brown and tan dyes came from different tree barks (black oak being the one with the greatest coloring power); as well as from flowers like marigold and camomile; and hulls from walnuts, hickory nuts and pecans; berries like juniper and sumac; and leaves like poplar and birch; even from tea and coffee. As for yellow shades, she got them from onion skins, sunflowers, zinnias marigolds, asters, even cotton flowers, as well as from different barks, leaves, and berries.

"But she also discovered that many substances often recommended for use in dyeing are unsatisfactory because they will not give fast colors on either wool or cotton. Among these are beets, crab-apple peels, blackberries, barberries, blueberries, cranberries, pokeberries, purple iris flower, roses, mosses, peach and sumac leaves and turmeric.

"Miss Furry says you can gather the materials for your natural dyes all the year around and then keep them dry and away from mold until you have leisure to use them -- at some season like midwinter. She says fall and winter are the best times for collecting barks except the resinous barks which you may gather in the spring. The time to collect your flowers for dyeing, of course, is when they are in bloom, and your leaves when their color is deepest."

That concludes this week's letter from Washington. But our correspondent adds in a postscript that if you want further information on natural dyeing you can purchase the bulletin, "Home Dyeing with Natural Dyes," for 5¢ from the Superintendent of Documents, Government Printing Office, Washington, D. C.

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